Section-A

Multiple Choice Questions(MCQ's)

M.Marks: 17 Time:15 minutes

Q.1 Choosethe correct answer for each from the given options:

(i) The only liquid metal in ________________.
(a) Gold (b) Mercury (c) Bromine (d) Noneof these

(ii) Mendeleev's periodic table contains ____________periods.
(a)7 (b) 8 (c)12 (d) 10

(iii) ________is the branch of chemistry which deals with the carbon compounds.
(a)Physical Chemistry (b) analytical Chemistry
(c)Inorganic Chemistry (d) Organic Chemistry

(iv) The elements of VII-A group are knwon as:
(a) Halogens (b) Lanthanides
(c)Actinides (d) None of these

(v) The formula of baking soda is:
(a) $Na_2 CO_3$ (b) $Na_2 CO_3 . 8H_2O$
(c) $NaCHO_3$ (d)$CaCO_3$

(vi) Which one is a weak acid:
(a) HCl (b) H_2SO_4 (c) CH_3COOH (d) HNO_3

(vii) The heat given out in a chemical reaction is called _______reaction.
(a) Endothermic (b) Exothermic (c) Enthapy (d) None of these

(viii) The solubility of a gas __________with the rise in temperature.
(a)Increase (b) Decrease (c) Similar (d) None of these

(ix) Hydrogen was discovered by:
(a) Faraday (b) Priesly (c) Cavendish (d)Dalton

(x) 5 moles of water is equals to :
(a) 80gm (b) 90 gm (c) 100 gm (d) 90 a.m.u

(xi) The neucleus of an atom consist of:
(a) Electrons and Protons (b) Protons and Neutrons
(c) Co-ordinate Covalent bond (d) None of these

(xii) Charge on an electron is :

(xiii) The shared pain of electron which links the atoms in a molecule is known as:
(a) Electrovalent bond (b) Covalent Bond
(c) Co-ordinates Covalent bond (d) None of these

(xiv) Co-ordinate Covalent bond is always formed between the two atoms:
(a) Like atoms (b) Unlike atoms (c) Similar atoms (d) None of these

(xv) The temperature at which the vapour pressure of a liquid, becomes equal to its external pressure is called __________point.
(a)Melting (b) Boiling (c) Triple (d)Freezing

(xvi) 10% M./M solution contains 10 gm solute, dissolved in _______ solvent.
(a) 100 gm (b)90 gm (c) 80gm (d) 110 gm

(xvii) The value of one Faraday in electric charge is ________coulombs.
(a) 95500 (b) 96500 (c) 94500 (d) None of these

Section-B (Short Answers)

Note: Write short answer any "Eight" of the following questions.

Q.2 Define chemistry .Give the name of any six branches of chemistry.

Q.3 Define the law of definite proportions in your own words. Give an example.

Q.4 Discuss some of the physical properties of the elements which exhibits periodicity.

Q.5 Give the characteristics of Covalent Bond.

Q.6 Define any two of the following terms:
(i) Evaporation (ii) Boiling point (iii)Standard Solution

Q.7 Differentiate between any one of the following:
(i) Saturated and unsaturated solution (ii) Solution and Suspension

Q.8 Define Electrolyte and Non- Electrolytes.

Q.9 Calcaulate molarity of solution containing 16 gm of glucose ($C_6 H_{12} O_6$) in 500 ml of solution.

Q.10 What is slat? Give any three formula of the following salts.
(i) Common Salt (b) Potash Alum
(iii) Copper Sulphate (d) Sodium Carbonate

Q.11 Calculate the pH of 0.01 M HCl solution.

Q.12 Balance the following equation?
(i) $C + O_2 \longrightarrow CO$
(ii) $KNO_3 \longrightarrow KNO_2 + O_2$
(iii) $N_3 + H_2 \longrightarrow NH_3$
(iv) $CH_4 + O_2 \longrightarrow CO_2 + H_2O$
(v) $Na + O_2 \longrightarrow Na_2 O.$

Section-C (Descriptive)

Note: Answer any TWO of the following questions in detail.

Q.13 (a) What is chemical reaction? Explain any three types of chemical with example.
(b) Calculate the formula mass (in a.m.u) of each of the following:
(i) KNO_3 (ii) Al_2O_3 (c) $C_6 H_6$ (iv)H_2O
(Atomic mass: K = 39, = 14, O = 16 ,H =1, C= 12, Al = 27)

Q.14 (a) Define disocovery of Electron by discharge tube experiment.
(b) How many protons, Neutoron ,Electrons are persent in the following atoms?
(i) $^{18}_{7}N$ (ii) $^{27}_{13}Al$ (iii) $^{39}_{19}K$ (d) $^{80}_{17}CO$

Q.15 (a) Deschbe the construction and working of Dry Cell.
(b) Define metalic bond.